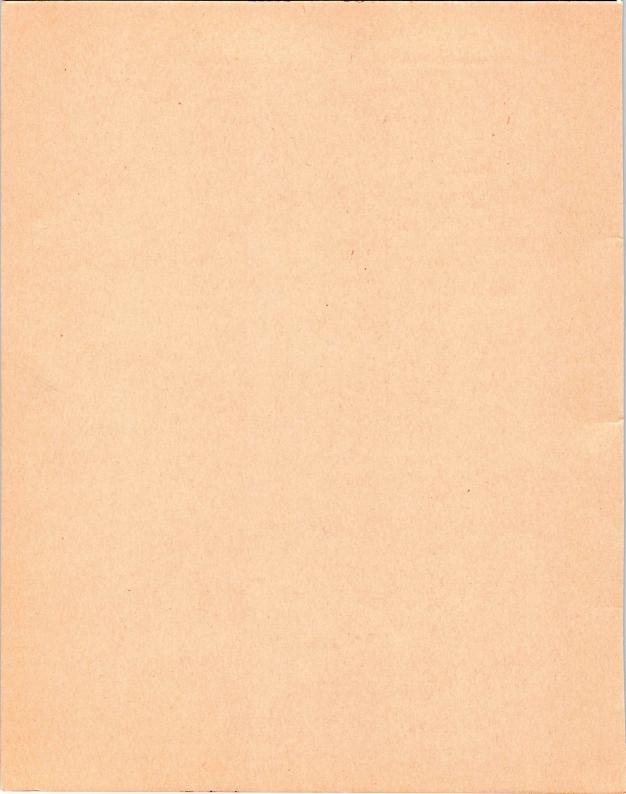
Department of Agriculture



OF INSECTS, ETC., ENTERING
NEW ZEALAND

March 1957 - March 1958

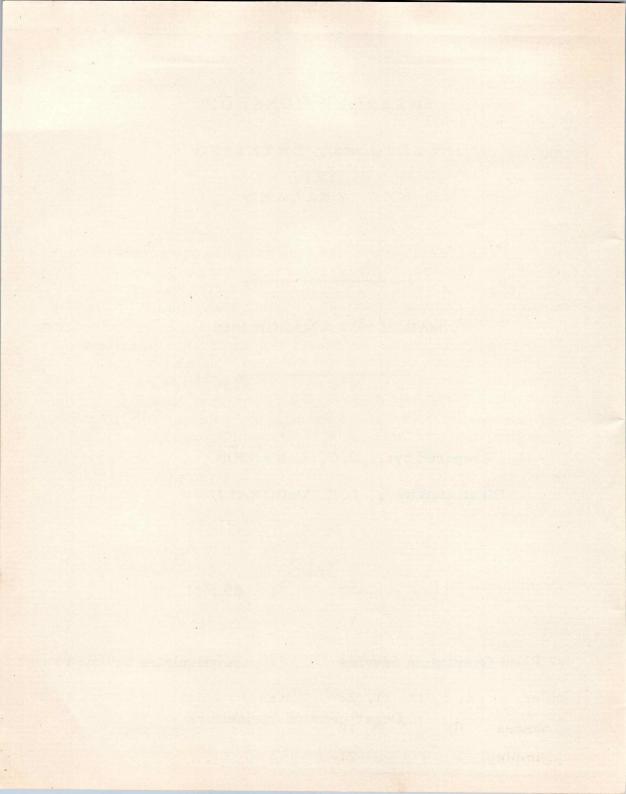


INTERCEPTIONS OF INSECTS etc., ENTERING NEW ZEALAND

MARCH 1957 - MARCH 1958

Prepared by ... D.C.M. MANSON Illustrated by ... L. H. McDOWALL

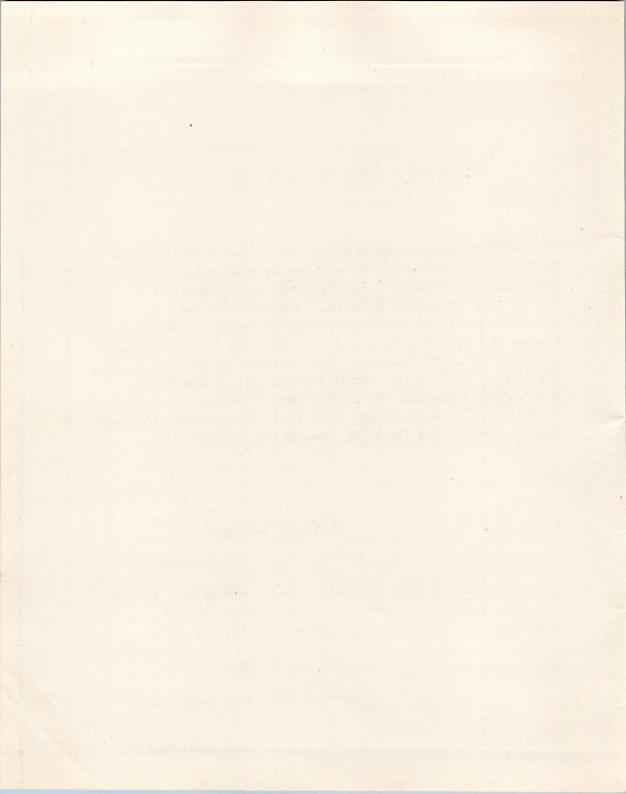
Plant Quarantine Service Horticulture Division



ACKNOWLEDGEMENTS

Many persons have given me valuable assistance in the identification of the various specimens. I am particularly grateful to Dr Hall and his colleagues of the British Museum, London. I would also like to thank Dr Evans of the Australian Museum; Dr P.B. Carne of the C.S.I.R.O., Australia; Mr B.A. O'Connor of Fiji; Mr A.N. Burns of the National Museum, Melborne, Australia; Mr H. Womersley of the South Australian Museum; Dr Dell of the Dominion Museum, Wellington, New Zealand; Mr L.J. Dumbleton, D.S.I.R. New Zealand, and Dr T.E. Woodward of Australia.

D. C. M. Manson



INTRODUCTION

This second pamphlet is based on the same lines as the previous one, except that there is appended a host-insect list, which summarises the information contained in both pamphlets.

The pamphlet is intended primarily for Plant Quarantine Officers throughout New Zealand, and for this reason interceptions are listed by district, and, where possible, common names are included.

For the twelve-month period March 1957 - March 1958, 130 specimens were intercepted entering New Zealand: 66 of these came by sea, 44 by air, and 20 by parcel post; 48 of these interceptions were taken in the Wellington district and 36 at the airport of Whenuapai.

An interesting feature is that specimens were received from 28 countries. However, the greatest number of interceptions were from Australia (37) and Fiji (28), so it would appear that the greatest likelihood of the introduction of new pests would be from these two countries. Australia possesses two insects of great economic importance, the Argentine ant, Iridomyrmex humilis, and the fruit fly Strumeta tryoni. There is always the possibility of these insects being introduced into New Zealand, particularly the Argentine Ant. Ants are intercepted periodically in plants or with general cargo from Australia, but fortunately, so far, none of these has proved to be the Argentine ant.

Many species occur regularly on importations into New Zealand. Such examples are the red scale, Aonidiella aurantii, on citrus, the bulb mite Rhizoglyphus echinopus, on various bulbs; the purple scale, Lepidosaphes beckii, on citrus, various cockroaches (fam. Blattidae), mainly on bananas; and the stored-products pests. Apart from the purple scale, most of these are found throughout New Zealand.

Of insects not present in the country, the most important interception was the larvae of the fruit fly Dacus dorsalis. About 20 larvae were found in a basket of mangoes from the Philippine Islands. This is the first record of the interception of a fruit fly for a number of years. The egg rafts of a Noctuid moth (probably Prodenia litura) are still being taken on the outsides of aircraft. The aphid Anuraphis tulipae was taken on two occasions. This also appears to be the first record for a number of years. A larva of the false codling moth, Argyroploce leucotreta, was taken in an orange from South Africa. It is a pest of some importance in the citrus areas of South Africa. Mosquitoes (Aedes sp. and Culex sp.) occur at fairly regular intervals in aircraft, and there is always a chance that they could establish in the Auckland area.

Other insects that could be classed as potential pests are the scale Lepidosaphes gloverii, the ant Hypoclinea goudiei, the scarab beetle Cyclocephala signaticollis, and possibly the moth Dracaenura pelochra.

AUCKLAND

Collected by C. Crapp

A 163 Pheidole sp. pr megacephala (fam. Formicidae)

17.4.57 The big-headed ant. With general cargo from Singapore. See M 2 of previous pamphlet.

A 165 Hypoclinea goudiei (fam. Formicidae

10.5.57 This is a dark-coloured ant, about 3 mm long. It has no distinctive features. Taken in orchid blooms from Sydney, which were carried by an aircraft. This ant would seem to be an undesirable species from New Zealand's viewpoint. It is widespread in southern Australia, where it is known to be a nuisance in houses, because of its habit of entering kitchens, etc. in search of food.

A 166 (a) Panchlora sp. pr. cubensis (fam. Blattidae)

17.9.57 This pale-green cockroach has been recorded at various ports in the U.S.A., especially on shipments of bananas from Central America. It is about $\frac{3}{4}$ long.

Nyctibora tenebrosa (fam. Blattidae)

A large, dark-brown cockroach, $1\frac{1}{4}$ long. Both insects were taken off a shipment of bananas from Ecuador.

A 167

(a) Fam. Theraphosidae

19.9.57

Though an extremely large, fearsome looking spider, it is probably harmless.

(b) Cupiennius sp. (fam. Ctenidae)

Two spiders of this genus were present, a female and an immature female. The members of the family Ctenidae wander about in search of their prey, many of them over the foliage of forests at night. Some of the tropical species are very large.

The spiders were off bananas from Ecuador.

A 170

Fam. Elateridae

20.11.57

A large larva (2") was found on the outside of timber from various Eastern ports. The larva had presumably been boring in the timber. Insects of this family are commonly known as "click" beetles, and the larvae of some species are destructive to various agricultural crops.

A 171

Carpophilus humeralis (fam. Nitidulidae)

12.11.57

Off pineapples from Hawaii. This insect is commonly known as a sap-feeding beetle, frequently being found on fermenting fruit. It is said to be quite abundant in the pineapple fields of Hawaii.

Its distribution includes Fiji, Africa, Philippine Islands, Hawaii and North America. It is 4 mm long and dark, with the last 3 abdominal segments protruding from beneath the wing covers.

A 173

Scorpion

Plate 1.

13.12.57

One specimen was taken in general cargo from Singapore. Scorpions are nocturnal in habit, feeding largely on insects and spiders. The sting of most species is painful and is usually accompanied by local swelling and discolouration. Only rarely, though, does the sting of a scorpion prove fatal. They are not established in New Zealand.

TAURANGA

Collected by H.S. Taylor

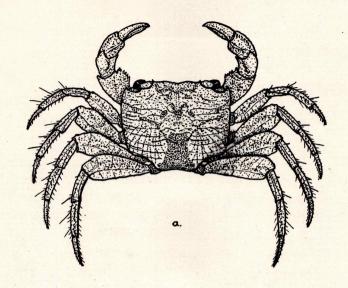
E 1 Phosphuga atrata (fam Silphidae)

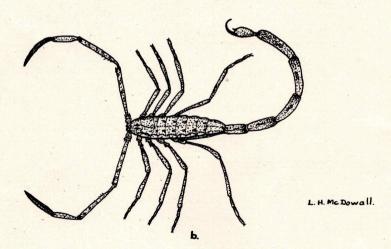
14.1.58 Off begonias from England. This is a British species, usually found under bark and in moss. It is about 8 mm long, black, with a small snout-like head. Members of this family are often known as carrion beetles or burying beetles, as they are frequently found about the bodies of dead animals, and by digging around small animals can completely bury them.

E 2 Nezara viridula var. torquata (fam. Pentatomidae)

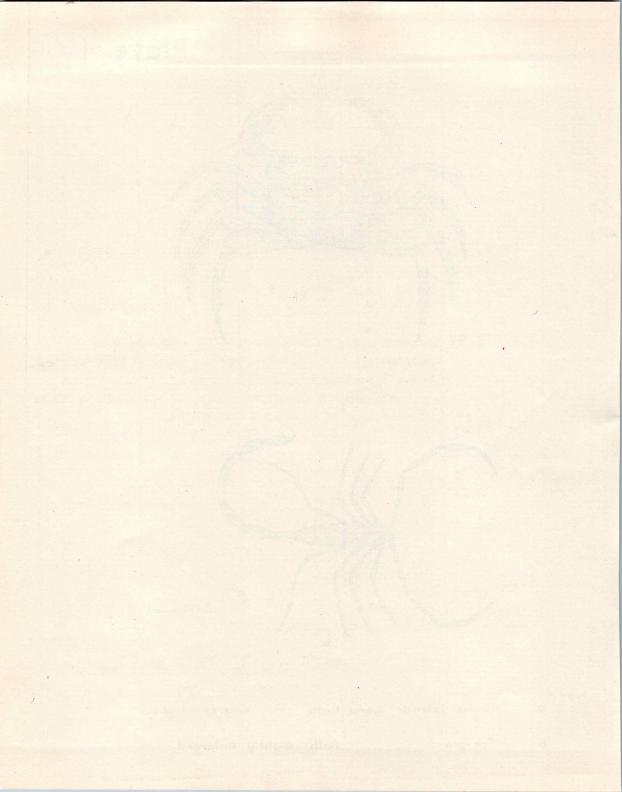
14.1.58 Found on Litchi chinensis. By parcel post from Hong Kong. This insect is a particularly fine specimen, slightly larger than the normal green vegetable bug, and with a conspicuous pinkish band running across the thorax.

Plate 1





- a. Pacific Islands Land Crab Geograpsus grayi
- b. Scorpion. Both slightly enlarged.



GISBORNE

Collected by J. Overbye

G 4	Psocids
13.6.57	In dried herbs from Hong Kong. See previous pamphlet.
G 9	Heteropoda venatoria (fam. Heteropodidae)
16.12.57	A female spider carrying an egg sac was intercepted on bananas from Fiji. This spider is frequently found on bananas, from whence it derives its common name, the banana spider. See A 162 of previous pamphlet.

KERIKERI

Collected by L. Saxton

Il <u>Periplaneta americana</u> (fam. Blattidae)

The American cockroach. On taro roots and cuttings from the Cook Islands. By parcel post. See K 19 (b) of previous pamphlet.

PALMERSTON NORTH

Collected by T. Flint

J 295 <u>Calandra oryzae</u> (fam. Curculionidae)

31.5.57 In nuts from Hong Kong. See M6 of previous pamphlet.

J 302 Fam. Nabidae

3.7.57 On plants of Monstera deliciosa from Australia. By parcel post. Insects of this family are known as damsel bugs. They are predactious on aphids, small caterpillars, and a variety of other insects.

J 308 <u>Lepidosaphes camelliae</u> (fam. Coccidae)

26.8.57 The camellia scale. Taken on camellia plants from Australia. By parcel post. This scale is somewhat similar to purple scale in appearance, but is lighter in colour. It is present in Australia, U.S.A., and Japan, but not in New Zealand. Probably of minor economic importance.

J 313 Quadraspidiotus perniciosus (fam. Coccidae)

A heavy infestation of San Jose scale was found on leaves of Ficus sp. and Nerium sp. from Australia. By parcel post. The San Jose scale is widespread throughout New Zealand and is a serious pest of deciduous fruits.

J 325 Fam. Coccidae

19.11.57 A single mealybug on geranium plants from Australia.

J 326 Fam. Anthribidae

27.11.57 The fungus weevils. A larva of this family was found in cassia seed from South Africa, and eventually reared to maturity. The adults of this group are usually found on dead twigs or beneath loose bark. The larvae vary in habits; some breed in fungi, some feed on seeds, and a few bore in dead wood. See R 124 (b) of previous pamplet. By parcel post.

J 354 Rhizoglyphus echinopus (fam. Acaridae)

14.3.58 On lily bulbs from Japan. See S 19 of previous pamphlet.

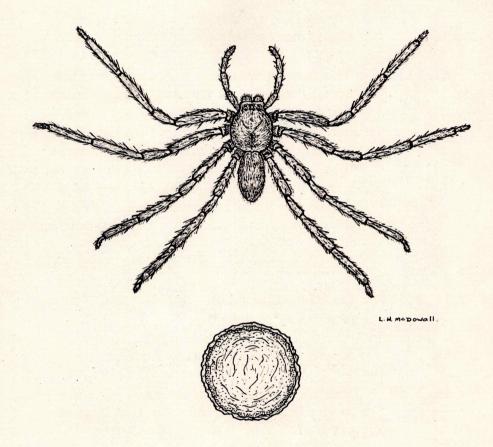
J 355 Aonidiella aurantii (fam. Coccidae)

19.3.58 The red scale. On oranges which were part of the stores of a United States aircraft from Japan. See J 164 of previous pamphlet.

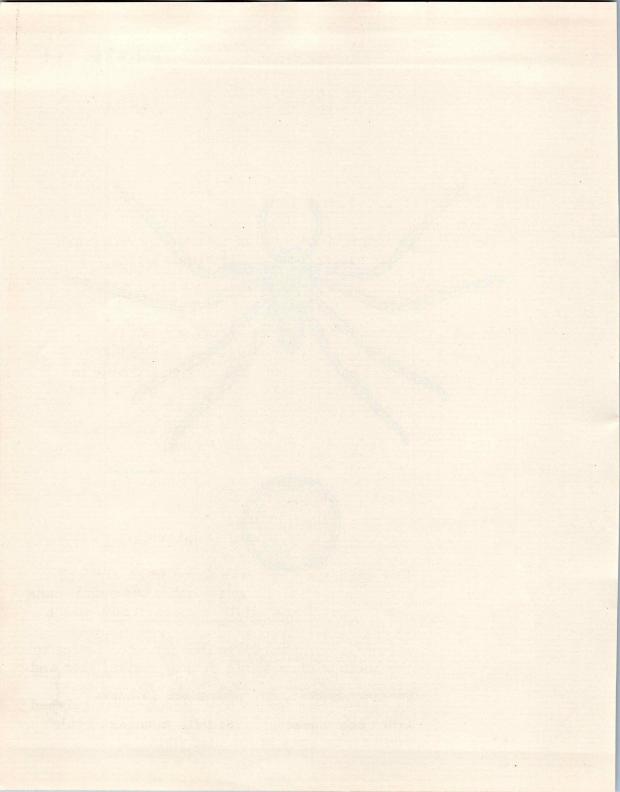
J 356 <u>Saissetia oleae</u> (fam. Coccidae)

18.3.58 The olive scale. A female bearing eggs was taken on some bananas by aircraft from Norfolk Is. This scale is widespread throughout New Zealand, frequently attacking citrus.

Plate II



Banana Spider - Heteropoda venatoria with egg case Slightly enlarged



WHENUAPAI

Collected by R.J. Prestidge

K 71 Fam. Tortricidae?

12.4.57 A single dead moth of this family was taken in an aircraft from Christmas Island.

K 72 Prodenia litura ? (fam. Noctuidae)

16.4.57 Several egg rafts were taken from the undersides of the wings and on the tail of an aircraft from Fiji. I was unable to rear specimens to maturity. See K 39 of previous pamphlet.

K 73 ? Aedes sp. (fam. Culicidae)

26.4.57 A dead mosquito was found in an aircraft from Australia.

K 75 Perkinsiella sp. (fam. Delphacidae)

One dead specimen was found in an aircraft from Australia. It is probably the sugar-cane leaf hopper Perkinsiella saccharicada, which is very destructive in Queensland and was formerly so in the Hawaiian Islands. Owing to the habit of ovipositing in cane stalks, this and other species are liable to transportation.

Insects of this family are readily distinguished from other leaf hoppers by a large triangular spur at the apex of the hind tibia.

K 76 Lepidosaphes beckii (fam. Coccidae)

3.5.57 The purple scale. By aircraft from Fiji. Found on citrus fruit carried by a passenger. See J 157 of previous pamphlet.

K 77 Fam. Pyraustidae

9.5.57 One moth was found dead in an aircraft from Holland. This family includes a large number of species, the larvae feeding on a wide variety of plants.

The most important insect of this family is the European corn borer, Pyrausta nubilalis, the larvae damaging corn and other plants.

K 78 (a) Lepidosaphes beckii (fam. Coccidae)

13.5.57 (b) Aonidiella aurantii (fam. Coccidae)

Both insects were on lemons from Norfolk Island.

K 82 Anoplognathus olivieri (fam. Scarabaeidae)
Plate V.

In an aircraft from Australia. Beetles of this genus are commonly known as Christmas beetles, most of them being large and conspicuously coloured.

A.olivieri is an oval, dark-green species, about an inch long. It is found only in Australia, along the eastern coastal belt of eastern Australia from southern Queens-land to western Victoria, and in Tasmania. It has been recorded as a minor pest of eucalypts.

K 84 Prodenia litura ? (fam. Noctuidae)

29.6.57 An egg raft which appeared to be of this species was found on hibiscus cuttings carried by a passenger in an aircraft from Fiji. See K 39 of previous pamphlet.

K 85 Fam. Flatidae

11.7.57 A nymph was taken on hibiscus cuttings from Fiji. The nymph is totally unlike an insect in appearance, being largely covered with long, white, waxy filaments. Insects of this family inhabit tropical areas and are frequently beautifully coloured. They are mothlike in appearance. We have two common introduced species in New Zealand which are of minor economic importance.

K 87 Periplaneta sp. (fam. Blattidae)

26.8.57 An immature cockroach on a pawpaw from Fiji.

K 88 Helophilus trilineatus (fam. Syrphidae)

16.9.57 A hover fly in an aircraft from Australia. See K 62 of previous pamphlet.

K 89 Prodenia litura ? (fam. Noctuidae)

25.9.57 An egg raft on the outside of a plane from Fiji. About 20 - 30 larvae were alive on arrival.

K 90

Lepidosaphes gloverii (fam. Coccidae)

25.9.57

Commonly known as Glover's scale, this species is somewhat similar to purple scale in appearance, but is of less economic importance. The scale of the female is $2\frac{1}{2} - 3\frac{1}{4}$ mm long, and brownish yellow to dark brown. It is not present New Zealand. The life history of Theore's scale is similar to that of the arple scale, and it is similar in habits, except that some preference is shown for the twigs and branches rather than for the leaves and fruit. The specimens were taken on crotons, by air from Fiji.

K 93

Lasioderma serricorne (fam. Anobiidae)

14.10.57

The tobacco beetle. On gerbera plants from Norfolk Island by air. Must have accidentally been associated with these plants, as it is a stored-products pest. See N 1 of previous pamphlet.

K 94

Heteropoda sp. (fam. Heteropodidae)

14.10.57

A young spider was found in the cargo of an aircraft from Australia.

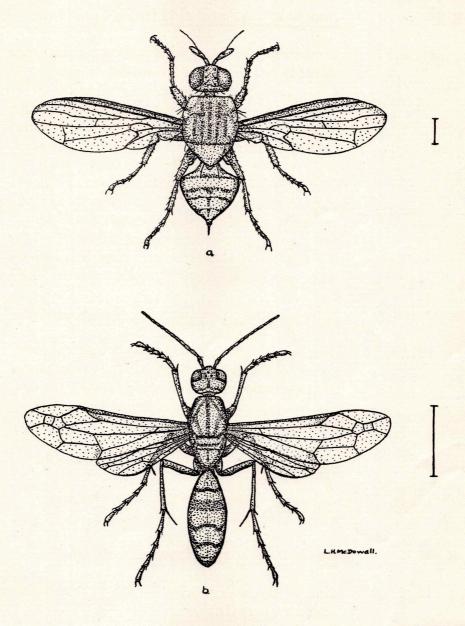
K 95

Ceroplastes sp. (fam. Coccidae)

16.10.57

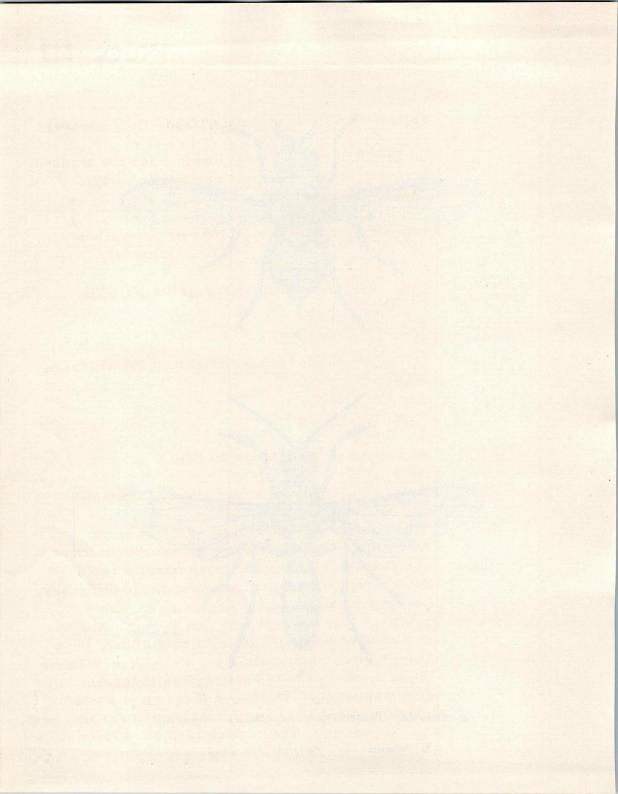
One of the wax scales. On croton leaves from Australia.

Plate III



a. Oriental Fruit Fly - Dacus dorsalis.

b. Wasp - Polistes hebraeus.



K 96

- (a) Perkinsiella vitiensis (fam. Delphacidae)
- 31.10.57 In Fiji this insect is responsible for the transmission of the virus disease known as Fiji disease of sugar cane.
 - (b) Culex sp. either pipiens or pervigilans (fam. Culicidae)

Both insects were in an aircraft from Fiji.

K 98

Millipedes

2.11.57 On the roots of <u>Tradescantia</u> sp. By air from England.

K 99

Fam. Noctuidae

4.12.57 A moth in an aircraft from Fiji.

K 100

Cyclocephala signaticollis (fam Scarabaeidae)

8.12.57

This beetle was taken in an aircraft from Australia. It is a pasture scarab which was accidentally introduced into Australia about ten years ago. It is now common about Sydney, its original home being Argentina. The beetle is just over ½" long and brown. There are usually faint, though distinct, short, wavy black lines at intervals along the elytra. These black marking tend to distinguish it from allied species. The larva feeds on pasture grasses and could possibly become a serious pest.

K 101 Limnoxenus zelandicus (fam. Hydrophilidae) 10.12.57 Found in an aircraft from Australia. See R 155 (b) of previous pamphlet. K 102 Mitrastethus baridoides (fam. Curculionidae) 28.1.58 A single live specimen was found in an aircraft from Holland. K 103 Polistes hebraeus (fam. Vespidae) Plate III. 9.2.58 A single specimen of this wasp was taken in an aircraft from Fiji. wasp is yellowish and about 411 long. It belongs to the same family as the introduced European wasp (Vespula germanica), and is somewhat similar in appearance and habits, except that the colonies are smaller. insect is very common in Fiji. is an introduced species of Polistes in North Auckland (P. humilis) which was accidentally introduced from It is reddish brown. Australia. K 104 Fam. Vespidae 8.2.58 Part of a wasp's nest was found inside a piece of bamboo carried by an aircraft passenger from Fiji.

K 107

Tribolium castaneum (fam. Tenebrionidae)

18.2.58

The red flour beetle. In beans carried by an aircraft passenger from India. This beetle is reddish brown and about $3\frac{1}{2}$ mm long. It is practically world-wide in distribution, being particularly prevalent in tropical areas. All beetles of this family can be immediately recognised by only having 4 segments in the hind tarsi, whereas the first and second legs have tarsi of 5 segments. This beetle primarily infests flour, although it has also been recorded on a host of other stored products.

K 108

(a) Tribolium castaneum (fam. Tenebrionidae)

23.2.58

(b) Ponera sp. (fam. Formicidae)

A queen ant. Both insects were found in an aircraft from Fiji.

K 109

- (a) Chironomus sp. (fam. Chironomidae)
- 24.2.58 See K 25 (c) of previous pamphlet.
 - (b) Fam. Cecidomyiidae

A gall midge. The specimen was too damaged for a specific identification. Both insects were in an aircraft from Australia, via Norfolk Island.

K 110

Chironomus sp. (fam. Chironomidae)

25.2.58 A live specimen in an aircraft from Australia.

K 111 Pheidole sp. (fam. Formicidae)

6.3.58 About 50 worker ants were taken on pineapples carried from Fiji, by air. See M 2 of previous pamphlet.

K 112 Fam. Gryllidae

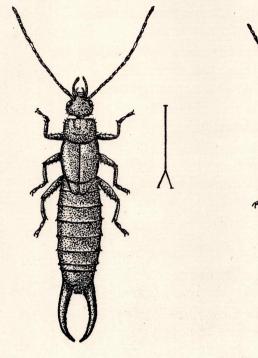
11.3.58 An immature insect of this family was received on orchid blooms from Honolulu y air.

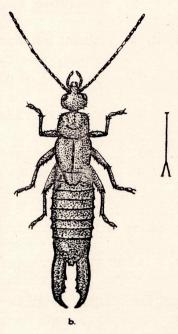
Collected by B. Short

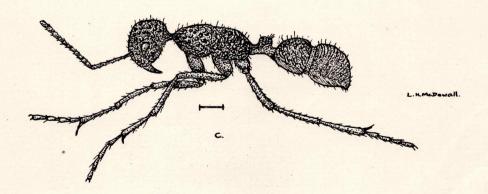
K 105 Fam. Tortricidae

11.2.58 One moth of this family was taken in an aircraft from Fiji.

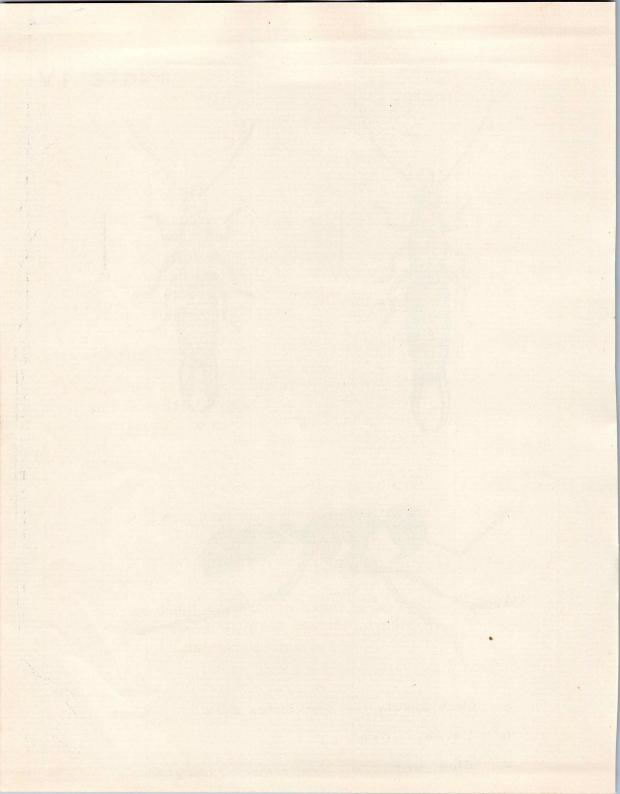
Plate IV







- a. Black earwig Chelisoches morio: Female.
- b. C. morio : Male
- c. Blue ant Chalcoponera chalybaea.



NEW PLYMOUTH

Collected by L. Mayo

L 33	Neodryinus sp. (fam. Dryinidae)
16.5.57	A live larva and pupa were found on the leaves of plants of Monstera deliciosa from Australia. These insects are usually internal parasites of leafhoppers.
L 34	Caliroa limacina (fam. Tenthredinidae)
16.5.57	The common pear slug, which is widespread throughout New Zealand. A larva of this insect was found on leaves of Monstera deliciosa from Australia.
L 49	Snail
3.3.58	A small immature specimen was found on Viburnum lantana from Holland.
L 50	Oribatid mites
3.3.58	Several of these mites were found on Viburnum lantana from Holland. See J 124 (b) of previous pamphlet.

WELLINGTON

Collected by H. R. Dalley

M 11

(a) Sciara sp. (fam. Mycetophilidae)

20.5.57

These are very small black flies, seldom more than 4 mm long. They can be recognised by their characteristic wing venation, and also in that the eyes curve to meet one another above the antennae. This is shown in the diagrams. They are usually found in damp places where there is an abundance of decaying vegetation or fungi. Some species cause damage to cultivated mushrooms.

(b) Rhizoglyphus echinopus (fam. Acaridae)

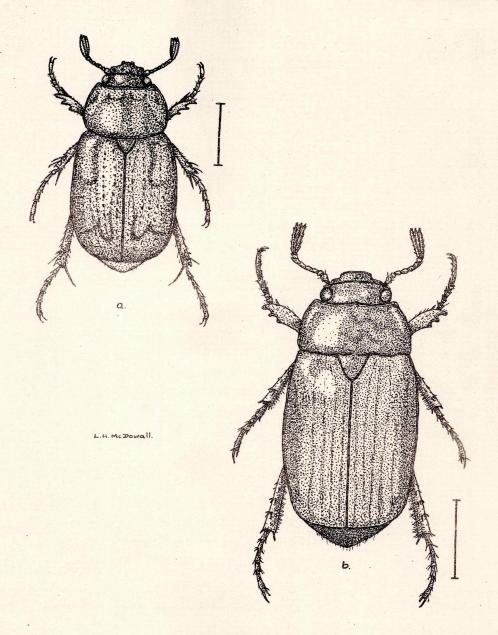
The common bulb mite. The specimens were found on begonia tubers from Holland. By parcel post.

M 13

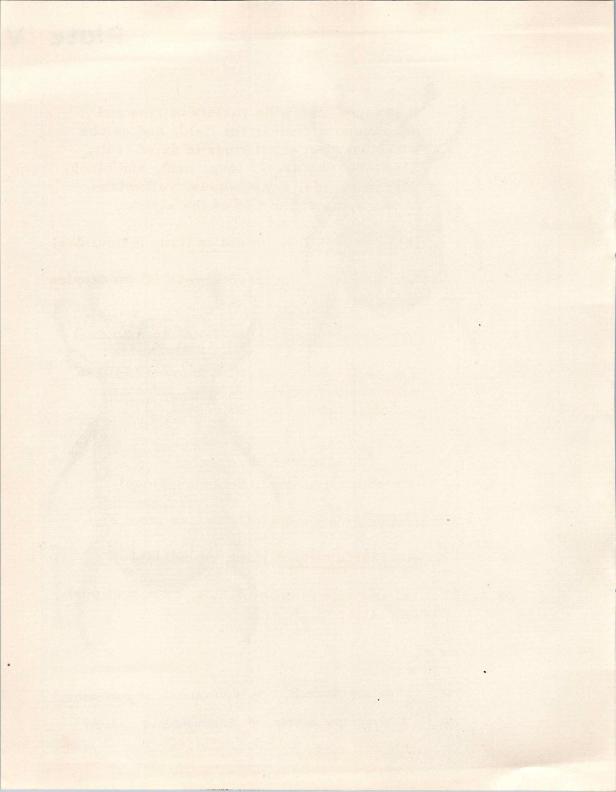
Ephestia cautella (fam. Phycitidae)

31.7.57

The almond or fig moth. In tree seed from Australia by parcel post. The larva of this insect is frequently a pest of stored products. The moth is a drab grey insect with a wing expanse of 14-20 mm.



- a. Pasture Scarab Cyclocephala signaticollis.
- b. Christmas beetle Anoplognathus Olivieri.



M 15

23.8.57

(a) Dacus dorsalis (fam. Trypetidae)

About 20 larvae of the oriental fruit fly were found in mangoes from the Philippine Islands. This is the first record of the interception of fruit flies for some years. This fly is a pest of tropical and subtropical fruits in the Pacific Islands, and was accidentally introduced into Hawaii about 1945, where it is now a serious There is some concern about the pest. possibility of its entering California. Among the fruits it attacks are avocado. citrus. persimmon, papayas and loquat. The oriental fruit fly is slightly larger than the house fly. It is yellow with dark markings on the thorax.

(b) Dolichoderus bituberculatus (fam. Formicidae

This tropical ant was also associated with mangoes from the Philippine Islands. It has a wide range of distribution, including India, Malaya Archipelago, New Guinea, and the Philippines. The ant is known to be an assiduous tender of scale insects.

(c) Typhaea stercorea (fam. Mycetophagidae)

On mangoes from the Philippine Islands. Known sometimes as the hairy grain beetle. It is a pest of stored grain and seeds, tobacco, peanuts, cocoa, etc. See J 217 (b) of previous pamphlet.

M 29 Periplaneta americana (fam. Blattidae)

30.10.57 With cases from overseas.

M 30 (a) Periplaneta americana (fam. Blattidae)

17.10.57 The american cockroach

(b) Blattella germanica (fam. Blattidae)

The German cockroach. See K 26 of previous pamphlet.

(c) Allacta notulata (fam. Blattidae)

A rather small, dark cockroach. Apparently of little significance. Three specimens were taken.

(d) Chelisoches morio (fam. Chelisochidae)
Plate IV

This is a large black earwig which is a native of the Philippine, Hawaiian, and other islands of the Pacific. It has been encountered several times on bananas from Fiji. It appears to be of little economic significance.

(e) Gryllus oceanicus (fam. Gryllidae)

A nymph of this cricket was taken. All specimens were on bananas from Fiji.

M 31

(a) Placostylus sp. probably gracilis

17.10.57 This tree-inhabiting snail is only found in Fiji.

It feeds on leaves.

(b) Brachylybas variegatus (fam. Coreidae)

See R 125 (a) of previous pamphlet.

- (c) Drosophila sp. (fam. Drosophilidae)
- (d) Fam. Cleridae

Sometimes known as checkered beetles. These beetles are usually brightly marked, covered with a dense pubescence, and have the thorax narrower than either the head or the base of the elytra. They are usually beneficial, as they are predacious on other insects.

(e) Fam. Attidae

One of the jumping spiders. These spiders are hunters and pursue their prey. They make no webs except as nests for overwintering or egg-laying.

(f) Fam. Gnaphosidae

This is a group of plain-coloured spiders about $\frac{1}{4}$! - $\frac{1}{2}$! long. They are usually found under stones or bark or in moss.

All specimens were with bananas from Fiji.

M 32 Persectania aversa (fam. Noctuidae)

2.11.57 One on our common "army worm" moths.

The specimen was taken in an aircraft from Australia. It is present in Australia and New Zealand.

M 34 Gryllus sp. (fam. Gryllidae)

19.11.57 An immature specimen of this cricket was found in bananas from Fiji.

M 35 Anuraphis tulipae (fam. Aphididae)

25.11.57 The tulip bulb aphid. On bulbs from Holland. This is a European species which has been widely distributed by commerce, although it does not seem to have established in New Zealand. It can be a pest of some importance on stored bulbs.

M 38 Cermatulus nasalis (fam. Pentatomidae)

19.12.57 In cases from Australia. This brownish bug is present in Australia and New Zealand. It is regarded as beneficial, since it attacks the larva of the pear-slug.

M 39 (a) Carpophilus hemipterus (fam. Plate VI. Nitidulidae)

16.1.58 One of the sap-feeding beetles. Commonly known as the dried-fruit beetle, this insect is almost world-wide in distribution.

It is found on a wide variety of ripe and decomposing fruit in the field, and can be a serious pest of all kinds of dried fruit. These beetles are $\frac{1}{8}$! long, oval, and black, with two large, conspicuous, yellowish-brown spots at the tips of the elytra.

(b) Carpophilus humeralis (fam. Nitidulidae)

See A 171. Both insects were off pineapples from Hawaii.

M 43 Araecerus fasciculatus (fam. Anthribidae)

26.2.58 The coffee bean weevil. See R 124 (b) of previous pamphlet. A heavy infestation in coffee beans from Indonesia.

M 44 (a) Gecko

7.3.58 (b) Centipede (fam. Scolopendridae)

Both animals were off bananas from Fiji.

M 45 Anuraphis tulipae (fam. Aphididae)

29.1.58 Off Iris tubers from U.S.A. by parcel post. See M 35.

Collected by M. McNamara

M 24A

Thermobia domestica (fam.

16.9.57

Lepismatidae)
The firebrat. Off hardware cases from Japan. This insect is wingless and about ½" long. It is greyish with numerous dark markings. Unlike many insects, it is covered with scales. The firebrat likes warm temperatures, and it has acquired its common name because it occurs in and around ovens, bakeries, and other extremely warm areas. It is worldwide in distribution.

M 25

Necrobia rufipes (fam. Cleridae)

25.9.57

The red-legged ham beetle. In goods from India. This beetle is shiny blue with reddish legs, and is about 5 mm long. The adults and larvae infest bacon, fish, bone meal, and stored meat as well as a variety of other products.

M 27

Plodia interpunctella (fam. Phycitidae)

7.10.57

The Indian meal moth. A severe infestation of this insect was found in almonds from Spain. The moth has a wing span of $\frac{5}{8}$ ". It is grey and can readily be recognised by the bronze-coloured areas on the apical two-thirds of the front wings. The larvae feed on cereals, dried fruit, nuts, etc., and can cause serious losses in stored foods. As with most stored-product pests it is world-wide in distribution.

M 28 Argyroploce leucotreta (fam. Eucosmidae)

8.10.57 The false codling moth. Two larvae were found in oranges from South Africa. This insect is a serious pest of oranges and also attacks apricots, peaches, plums, and walnuts. It is not established in New Zealand. In general appearance, habits, and in the nature of damage done, this insect closely resembles the codling moth. (Carpocapsa pomonella).

M 36 Anthocoris antevolens (fam. Anthocoridae)

6.12.57 Two insects were found in a shipment of apples from Canada. These bugs are usually predactious on other small insects, and so are regarded as beneficial.

M 40 Coelophora inaequalis (fam. Coccinellidae)

16.1.58 A single specimen of this ladybird was taken off pineapples from Hawaii. It is about 1/.5" long, shining orange-red with black markings It feeds principally on aphids.

M 41 Araecerus fasciculatus (fam. Anthribidae)

20.2.58 Nutmegs from Malaya were slightly infested with this weevil. See R 124 (b) of previous pamphlet.

M 42

(a) Oryzaephilus surinamensis (fam. Silvanidae)

21, 2, 58

See J 159 of previous pamphlet.

(b) Tribolium castaneum (fam. Tenebrionidae)

See K 107.

(c) Necrobia rufipes (fam. Cleridae)

See M 25.

A heavy infestation of these insects was found in cashew nuts from India.

M 14

Lasioderma serricone (fam. Anobiidae)

9.8.57

The tobacco beetle. A severe infestation of this beetle was found in turmeric. See N l of previous pamphlet.

Collected by A. Davies

M 12

Oryzaephilus surinamensis (fam. Silvanidae)

27.5.57

In lotus nuts from Hong Kong. See J 159 of previous pamphlet.

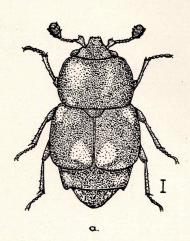
M 16

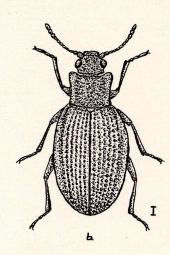
(a) Tenebrio sp. (fam. Tenebrionidae)

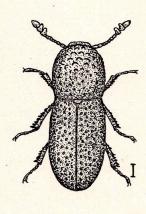
6.9.57

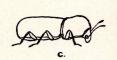
An adult of one of the mealworms. A single specimen was found in packing material around plants from Australia.

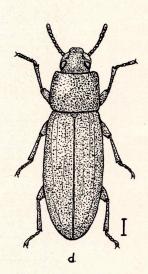
Plate VI





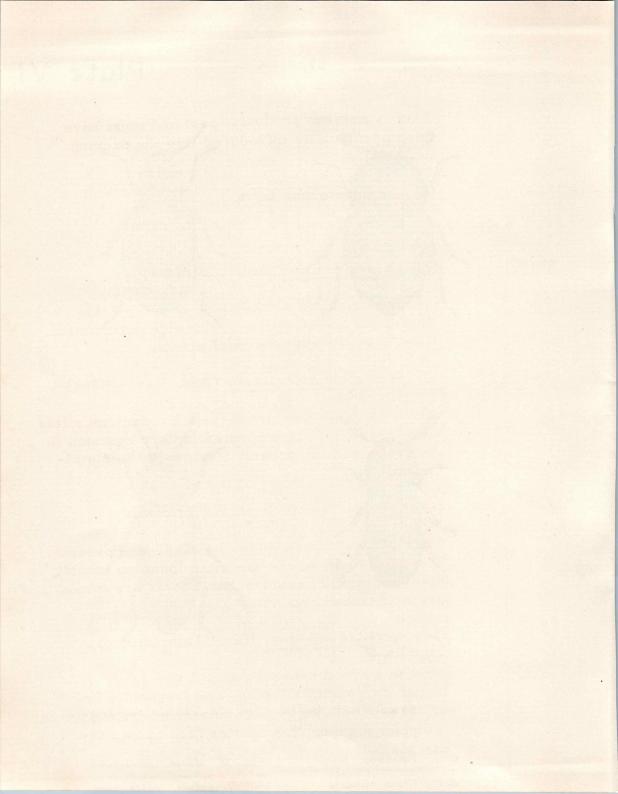






L. H McDowall

- a. Dried Fruit beetle Carpophilus hemipterus.
- b. Lathridiid beetle Enicous minutus.
- c. Bamboo borer Dinoderus minutus.
- d. Flour beetle Tribolium castaneum



This is a stored products pest and must have been accidentally introduced into the packing material.

M 17

(b) Lepidopterous larva

6.9.57

M 18

(c) Saissetia oleae (fam. Coccidae)

Commonly known as the black or olive scale. This is an insect with a world-wide distribution. It occurs on a wide range of plants.

M 19

(d) Parasitus americanus (fam. Parasitidae)

A considerable number of these predacious mites were present. This species is very common in Australia and is probably world-wide in distribution.

M 20

(e) Corticaria spp. (fam. Lathridiidae)

Four of these small brown beetles were present. The adults and larvae are often found on mouldy plant and animal substances. Some are minor pests of stored products.

(f) Enicmus minutus (fam. Lathridiidae)

This is a small brown beetle, 2 mm long. It is world wide in distribution, and frequently found in various buildings, particularly where it is moist or damp. The beetles feed on various moulds.

(g) Trogoderma sp. (fam. Dermestidae)

The larvae of these beetles feed largely on animal protein. They are somewhat similar to the ordinary carpet beetle in size and structure, but are covered with hairs instead of scales. The khapra beetle (Trogoderma granarium) is a serious pest of stored grain overseas.

(h) Fam. Staphylinidae

One beetle was found.

M 21 (i) Fam. Lathridiidae

Two larvae of this family were present.

M 22 (j) Psychoda sp. (fam. Psychodidae)

A moth midge. These small hairy flies frequent damp areas. They are of little economic importance. All the above specimens were found in packing material round plants from Australia.

M 24 (a) Tribolium castaneum (fam. TenebrionPlate VI. idae)

12.9.57 See K 107.

(b) Ephestia sp. (fam. Phycitidae)

See M 13.

Both insects were on cashew nuts. The origin of the nuts is uncertain; probably India.

CHRISTCHURCH

Collected by D.B. Crozier

- R 164 (a) Dipterous larvae
 - 30.4.57 (b) Garmania nesbitti (fam. Phytoseiidae)

These mites were sent to Mr H. Womersley, of Australia, who originally described the species in 1956. He states that this is the first occasion on which he has seen the male, the original description being based on the female. This mite has been previously recorded in Queensland (1952) and on bark scrapings of logs at Port Adelaide, South Australia (1954). It is predactious.

Both specimens were found on coconuts from Tonga, Cook Islands

- R 169 ? Aphis sp. (fam. Aphididae)
 - 8.7.57 A number of these aphids were found on cacti plants from Mexico. By parcel post.
- R 184 Geograpsus grayi
 Plate 1.
 - 4. 12. 57 On pineapples from the Cook Islands. This is one of the common land crabs found in the Pacific Islands.
- R 187 Slug
 - 13.12.57 One specimen was taken off bananas from Fiji.

R 191

Dinoderus minutus (fam. Bostrichidae)

5.2.58

A severe infestation of these bostrichid beetles occurred in wooden slats surrounding bales of sacks from Ceylon. This is a small dark-brown beetle about 3 mm long. It is widespread in tropical areas, being found breeding wherever dry bamboo is stored. This species prefers the wood of bamboo, but will also attack plants and vegetable products.

R 192

Dracaenura pelochra (fam. Pyralidae)

3.2.58

One moth was found in an aircraft from Fiji. The insect is yellowish, and has a wingspan of $\frac{3}{4}$ ". Lever has recorded the larvae as severely damaging the shoots of bean plants on the island of Taveuni (Fiji).

Collected by R.A. Darnell

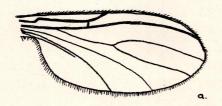
R 167

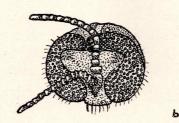
Pulvinaria camellicola (fam. Coccidae)

6.6.57

Commonly known as camellia scale. These specimens were taken on camellias from Australia by air. This scale is present in New Zealand, but is not regarded as a serious pest.

Plate VII

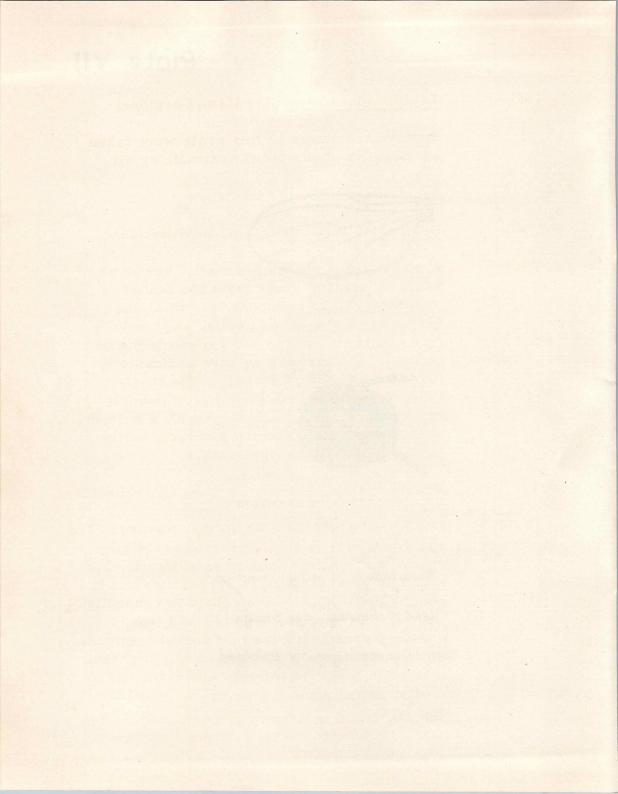




L. H. Mc Dowall

- a Sciarinae wing venation
- b. Head showing eye bridge

 Both figures greatly enlarged.



R 168

Lepidosaphes camelliae (fam. Coccidae)

6.6.57

Several specimens of this scale were taken on camellia plants from Australia by air.

See J 308

R 174

Dermestes lardarius (fam. Dermestidae)

23.8.57

A single larva of this Dermestid beetle was found in worsted wools from the United Kingdom. It is commonly known as the larder beetle or bacon beetle, as it usually feeds on ham, bacon, and various kinds of meats. The larva may have accidentally found its way into the wool. The beetle is world-wide in distribution. The adult is 7-9 mm long, usually dark with a whitish band at the base of the wing covers, which makes it readily recognisable.

R 179

Anoplognathus chloropyrus (fam. Scarabaeidae)

10.11.57

One of the Australian Christmas beetles. The specimen was found in a carton containing mixed fruit in the galley of an aircraft. The beetle is most striking in appearance and is about 20 mm long. The colour is generally yellowish brown, the abdomen and thorax are deep green, and the last dorsal segment of the abdomen is a distinctive bright green. It is quite abundant in parts of Australia and if often responsible for severe defoliation of eucalypts.

Collected by H. J. Wiggins

R 180 Fam. Curculionidae

25.11.57 A number of weevil larvae were taken in acorn and horse chesnuts from the U.S.A. by parcel post. Unfortunately, none of these survived to maturity.

R 182 Tortrix postvittana (fam. Tortricidae)

2.12.57 A single larva of this moth (apple leaf-roller) was found in oranges from Australia. This insect is widely distributed in Australia and New Zealand, being principally a pest of apples.

R 186 Cyclocephala signaticollis (fam. Plate V. Scarabaeidae)

12.12.57 See K. 100. Two of these beetles were found in an aircraft from Australia.

R 190 Dermestes maculatus (fam. Dermestidae)

5.2.58 Several larvae were in dried food from Hong Kong by parcel post. See R 142 of previous pamphlet.

R 193 Fam. Clubionidae

27.2.58 A spider in a sealed mailbag from Switzerland. The Clubionidae are a large group of rather small spiders which live in flat or tubular nests in rolled leaves, under stones or on the ground.

TIMARU

Collected by D.A. Richardson

- S l (a) Dermestes maculatus (fam. Dermestidae)
 - 27.1.58 The hide or leather beetle. See R 142 of previous pamphlet.
 - (b) Calandra granaria (fam. Curculionidae)

The common grain weevil. It is similar to the rice weevil in appearance, but lacks the 4 orange coloured spots on the wing covers. It is a world-wide species, attacking a variety of grain.

(c) Lasioderma serricorne (fam. Anobiidae)

The tobacco beetle. See Nl of previous pamphlet.

- (d) Anobium sp. (fam. Anobiidae)
- (e) Tribolium sp. (fam. Tenebrionidae)
- (f) Pseudoscorpion

Pseudoscorpions resemble scorpions, except that they are very small (not more than 5 mm. long) and lack a sting. They are usually found under bark, in moss, or under leaves. They feed chiefly on small insects.

All the above speciments were in a consignment of herbs and fish food from China.

S 22

- (a) Ptinus tectus (fam. Ptinidae)
- 19.6.57 The common brown spider beetle. It is reddish brown, about 3-4 mm long, and resembles a small spider to a casual glance. The beetle infests a wide range of stored products and is world-wide in distribution.
 - (b) Dipterous larva
 - (c) Dermestes sp. (fam. Dermestidae)

These insects were on buffalo horns from North Australia.

S 82

Aonidiella aurantii (fam. Coccidae)

30.10.57 A severe infestation of this scale was found in two cases of grapefruit from Australia, by sea. See J 164 of previous pamphlet.

INVERCARGILL

Collected by F. Wilkin

W	15	Chalcoponera chalybaea (fam. Formicidae)
	20.8.57	Two of these bluish ants were found on hard-wood poles from Australia. This ant is common in New South Wales, being often found in gardens where the soil tends to be gravelly. It appears to be of no economic importance, and is absent from New Zealand.
w	17	Periplaneta americana (fam. Blattidae)
	7.10.57	Two cockroaches in cornsacks from India.
w	19	Lasioderma serricorne (fam. Anobiidae)
	31.10.57	A heavy infestation of this beetle occurred on dried potatoes and herb roots from Hong Kong by parcel post. See N l of previous pamphlet.

A HOST LIST OF INTERCEPTIONS

January 1956 - March 1958

HOST (Common Name)	HOST (Scientific Name)	INSECT etc. (Common Name)	INSECT etc. (Scientific Name)
Acalypha Acorns Almonds Apples Bananas	Acalypha sp. Quercus acutissima Prunus communis Pyrus malus Musa paradisiaca var. sapientum	Hemispherical scale Weevil Indian meal moth Mite Cockroach Jumping spider German cockroach Squash bug Toad Earwig Wandering spider Fermentation fly Gecko Spider Cricket Banana spider Wood boring beetle Toad	Coccus hesperidum Balaninus sp. Plodia interpunctella Tyrophagus castellanii Allacta notulata Fam. Attidae Blattella germanica Brachylybas variegatus Bufo sp Chelisoches morio Cupiennius sp. Drosophila sp. Fam. Gnaphosidae Gryllus oceanicus Heteropoda venatoria Hylastes ater Lygosoma cyanurum
Beans	Phaseo Lus spp.	Cockroach Snail Lygaeid bug Cockroach American cockroach Snail Shield bug Cricket Olive scale Centipede Slug Staphylinid beetle Spider Bean weevil Bean pod borer Ant	Nyctibora tenebrosa Orpiella nouleti Orthaea sp. Panchlora sp. Periplaneta americana Placostylus sp. Plautia brunnipennis Podoscirtus sp. Saissetia oleae Scolopendra sp. Tachyporus sp. Fam. Theraphosidae Acanthoscelides obtectus Bruchus maculatus Maruca testulalis Pheidole sp.
	onlant.	Red flour beetle	Tribolium castaneum

HOST (Common Name)	HOST (Scientific Name)	INSECT etc. (Common Name)	INSECT etc. (Scientific Name)
		0116	
Beech	Fagus spp.	Oak Leaf miner	Lithocolletis messaniella
		Fungus gnat	Sciara sp.
		Oribatid mite	Trichoribates ceratozetidae
D	0	Mite	Tyrophagus castellanii
B egonia	Begonia sp.	Ground beetle	Fam. Carabidae
		Fungus gnat Búlb mite	Sciara sp.
Boronia	Boronia megastigma	Gall midges	Rhizoglyphus echinopus Fam. Cecidomyiidae
Buffalo horns	Doronta meyastiyma	Fly larva	ram. Cecidomy i idae
טעוו ענט וועוווס		Hide beetle	Dermestes sp.
		Spider beetle	Ptinus tectus
Bulbs		Bulb aphid	Anuraphis tulipae
Dates		Bulb mite	Rhizoglyphus echinopus
		Staphylinid beetle	Fam. Staphylinidae
		Aphids	? Aphis sp.
		Mealybug	Pseudococcus maritimus
Camellia	Camellia spp.	Scale	Lepidosaphes camelliae
		Scale	Pulvinaria camelicola
Cashew nuts	Anacardium	Moth	Ephestia sp.
	occidentale	Red-Legged ham beetle	Necrobia rufipes
		Saw-tooth grain beetle	Oryzaephilus surinamensis
We also have been a second and the		Red flour beetle	Iribolium castaneum
Cassia seed	Cassia sp.	Fungus weevil	Fam. Anthribidae
Clematis	Clematis sp.	Turtle scale	Coccus hesperidum
		Mite	Eberhardia michaeli
	t gay and a second seco	Ant	Lasius niger
Coconuts	Cocos nucifera	Fly larva	
The Residence was		Predacious mite	Garmania nesbitti
		Pavement ant	Tetramorium caespitum
Coffee beans	Coffea sp.	Coffee bean weevil	Araecerus fasciculatus
Copra meal	Cocos nucifera	Tobacco beetle	Lasioderma serricorne
Coriander seed	Cortanorum sativum	Predacious bug	Lyctocoris campestris
Cualana	0.14	Drugstore beetle	Stegobium paniceum
Crotons	Codiaeum sp.	Wax scale	Ceroplastes sp.
		Glover's scale	Lepidosaphes gloverii
		Pharaoh's ant	Monomorium pharaonis
Daphne	Daphne odora	Whitefly	Orchamus samoanus
pahinia	papinie odora	Circular black scale	Chrysomphalus rossi
		Turtle scale	Coccus hesperidum
Dates	Phoenix dactyLifera	Hemispherical scale	Saissetia hemispherica
-4 tog	ingonia datty triera	beetle	Oryzaephilus surinamensis
Dried food		Hide beetle	Dermestes maculatus
Fig	Ficus sp.	San Jose scale	Quadraspidiotus perniciosus
Fuchsia	Fuchsia sp.	Snail	Helminthoglypta sp.
			and of the

HOST (Common Name)	HOST (Scientific Name)	INSECT etc. (Common Name)	INSECT etc. (Scientific Name)
Gardenia	Gardenia sp.	Wax scale Mealybug	Ceroplastes sp. Pseudococcus adonidum
Geranium Gerbera	Geranium sp. Gerbera sp.	Mealybug Millipede	Pseudococcus sp.
Grapefruit Hemp seed	Citrus maxima	Red scale Dried fruit moth	Aonidiella aurantii Ephestia cautella
Herbs		Rice weevil Moth	Calandra oryzae Ephestia sp.
Herbs and fish		Booklouse Wood boring beetle	Psocidae Anobium sp.
1,000		Grain weevil Hide beetle Tobacco beetle	Calandra granaria Dermestes maculatus Lasioderma serricorne
		Pseudoscorpion Flour beetle	Tribolium sp.
Hibiscus	Hibiscus sp.	Bug Tomato worm	Flatidae Heliothis armigera
Iris tubers Lemons	lris sp. Citrus limonia	Aphids Red scale	Anuraphis tulipae Aonidiella aurantii
Lily bulbs	Lilium sp.	Purple scale Bulb mite	Lepidosaphes beckii Rhizoglyphus echinopus
Litchi Lotus nuts	Litchi chinensis Nelumbium sp.	Shield bug Rice weevil Saw-tooth grain	Nezara viridula var torquata Calandra oryzae Oryzaephilus surinamensis
Macadamia nuts	Macadamia terni-	beetle Dried fruit moth	Ephestia cautella
Mangoes	Mangifera indica	Oriental fruit fly Ant	Dacus dorsalis Dolichoderus bituberculatus
Monstera deliciosa	Monstera deliciosa	Hairy fungus beetle Pear slug	Typhaea stercorea Caliroa limacina
		Damsel bugs Parasitic wasp	Fam. Nabidae Neodryinus sp.
Nerium sp. Nutmegs Nuts	Nerium sp. Myristica fragrans	San Jose scale Coffee bean weevil Rice weevil	Quadraspidiotus perniciosus Araecerus fasciculatus Calandra oryzae
Oranges	Citrus sinensis	Red scale False codling moth	Aonidiella aurantii Argyroploce leucotreta
Orchids	Orchidaceae	Purple scale Apple Leaf roller Crickets Ant	Lepidosaphes beckii Tortrix postvittana Fam. Gryllidae Hypoclinea goudiei

HOST (Common Name)	HOST (Scientific Name)	INSECT etc. (Common Name)	INSECT etc. (Scientific Name)
Packing cases		Ant Leafhopper Predacious bug Leafhopper Katipo spider June beetle Cluster grub moth Termites Firebrat	Camponotus nigriceps Carneocephala sp. Cermatulus nasalis Draeculacephala mollipes Latrodectus katipo Phyllophaga sp. Prodenia litura Fam. Termitidae Thermobia domestica
Packing material		Springtails Beetle Beetle Beetle Caterpillars Crawling water beetle Staphylinid beetle Beetle mites Predacious mite Moth midge Olive scale Staphylinid beetle Mealworm Dermestid beetle Hairy fungus beetle	Collembola Coninomus sp. Corticaria sp. Enicmus minutus Fam. Hepialidae
Paeonies Palm seed	Paeonia spp.	Bulb mite Coffee bean weevil Bruchid beetle	Rhizoglyphus echinopus Araecerus fasciculatus Caryobruchus gleditsiae
Pawpaw	Carica papaya	Cockroach	Periplaneta sp.
Peas Pineapples	Pisum sativum Ananas comosus	Drugstore beetle Nitidulid beetle Nitidulid beetle Ladybird beetle Fermentation fly Land crab	Stegobium paniceum Carpophilus hemipterus Carpophilus humeralis Drosophila sp. Geograpsus grayi Phaidala rassanhala
	Control Contro	Big-headed ant Wee vil Mealybug	Pheidole megacephala Phlyctinus callosus Pseudococcus brevipes
Pine seedlings Potatoes Roses	Pinus sp. Solanum tuberosum Rosa spp.	Millipede Potato tuber moth Pharaoh ⁱ s ant	Diplopoda Gnorimoschema operculella Monomorium pharaonis
Shrub and tree seeds	ent ceres	Ant Bark beetle	Hyrmica ruginodis Coccotrypes dactyliperda

HOST (Common Name)	HOST (Scientific Name)	INSECT etc. (Common Name)	INSECT etc. (Scientific Name)
Taros Teasels Timber	Colocasia sp. Dipsacus s p.	American cockroach Booklice Ant Bostrichid beetle Wireworm Woodboring beetle	Periplaneta americana Psocidae Chalcoponera chalybaea Dinoderus minutus Fam. Elateridae Ernobius mollis
Tradescantia Trouser materia Turmeric Viburnum Violets	Tradescantia sp. al Curcuma longa Viburnum lantana Saintpaulia sp.	Spider Millipedes Hide beetle Tobacco beetle Beetle mites Snail Burrowing bug	Heteropoda sp. Diplopoda Dermestes maculatus Lasioderma serricorne Fam Oribatidae Mollusca
(African) Walnuts			Geotomus pygmaeus
na tilu to	Juglans sp.	Hide beetle Indian meal moth	Dermestes ater Plodia interpunctella

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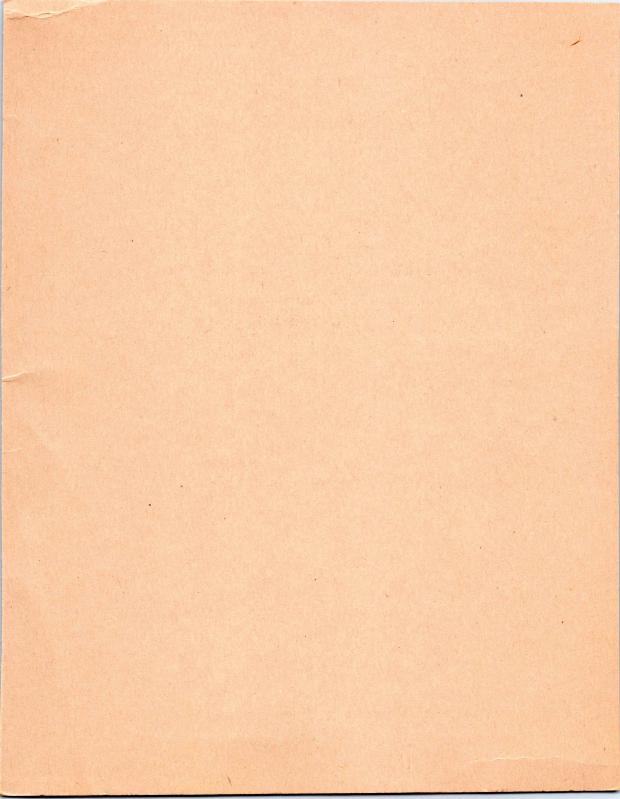
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